

A NEW SPECIES AND A NEW RECORD OF THE GENUS *LEPTOTHELAIRA* FROM CHINA (DIPTERA, TACHINIDAE)

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Abstract *Leptothelaira longipennis* sp. nov. (Diptera, Tachinidae) from Shanxi and Shaanxi, China is described and illustrated. *L. orientalis* Mesnil et Shima, 1979 is newly recorded from Guangxi, China.

Key words Diptera, Tachinidae, *Leptothelaira*, new species, new record, China.

1 Introduction

Leptothelaira Mesnil et Shima of the tribe Leptothelairini is an Asiatic genus of the Dexiinae (Diptera, Tachinidae) with four species found in South of Russian Far East, Japan, Nepal, Vietnam and Taiwan of China. It is distinguished from all other genera allied to Thelairini and Doleschaliini by vein R_{4+5} with only 1 seta at base and the thorax closed above hind coxae by a sclerotized bridge, scutellum with 2 pairs of marginal setae, abdomen elongate, nearly cylindrical, syntergite 1+2 excavated only at base.

In this paper one new species of the genus *Leptothelaira* from Shanxi and Shaanxi, China is described, and a new record species from Guangxi, China is reported.

2 Materials and Methods

Specimens used in this study are deposited in the Collection of Institute of Entomology, Shenyang Normal University, Shenyang, China (SNUC).

Measurements and terminology mainly follows McAlpine *et al.* (1981), male terminalia follows Tschorsnig and Richter (1998). The abbreviations of the chaetotaxy are used for thorax and leg: *ac*: acrostichal; *dc*: dorsocentral; *ia*: intraalar; *sa*: supraalar; *a*: anterior; *ad*: anterodorsal; *av*: anteroventral; *d*: dorsal; *p*: posterior; *pd*: posterodorsal; *pv*: posteroventral; *v*: ventral.

3 Description

Leptothelaira longipennis **sp. nov.** (Figs. 1-5)

Diagnosis. Ocellar seta fine and distinct, about as long as outer vertical seta, thoracic dorsum with inner

vittae about 1/2-5/6 as wide as pruinose portion between inner and outer vittae on presutural scutum, posterior 1/5-1/4 of abdominal tergite 4 and entire tergite 5 brown black; sternite 5 with round base and deep median cleft, surstylus distinctly pointed at apex, curved ventrally and outwards weakly.

Holotype ♂, Yanggetai, Pangquangou, Fangshan (37° 50' N, 111° 15' E), Lvliang, Shanxi, China, 24 June 1990, WANG Ming-Fu. **Paratypes:** China, 3 ♂♂, Mt. Taibai (34° N, 107° 45' E), Shaanxi, 9-16 June 1989, WANG Ming-Fu, 1 ♂, 1 ♀, Mt. Tiantai, Qinling, Shaanxi, 3 Sep. 1999, WANG Ming-Fu, ♂, Mt. Lingkong, Qinyuan, Changzhi, Shanxi, 4-6 Nov. 1999, WANG Ming-Fu.

Male. Body length 9.0-12.5 mm.

Head reddish yellow in ground colour, frontal vitta dark brown, fronto-orbital plate and parafacialia densely covered with silver white pruinosity, gena brown, with sparsely silver white pruinosity, upper occiput black, most of occiput covered with densely grayish white pruinosity. Antenna and palpus yellow, arista brown at base, darkened apically, prementum and labella yellowish. Vertex 1/7-1/6 of head width at narrowest point, frontal vitta distinctly narrower than fronto-orbital plate, the latter and parafacial bare, parafacial nearly parallel-sided, slightly wider than width of first flagellomere; facial carina absent; gena about 0.2 of eye height, lower margin of face not protruding forward. Inner vertical seta fine, 0.3-0.4 of eye height, outer vertical seta distinct, 0.5-0.6 of inner vertical seta, ocellar seta distinct but weaker than inner vertical seta and as long as or slightly longer than outer vertical seta, 11-13 inclinate frontal setae which 0.3-0.4 of eye height, lowest seta nearly level of basal

antenna; vibrissa strong, inserted at level of lower margin of face, 3-4 strong genal setae which are 0.5-0.7 times as long as vibrissa; occiput flattened, with irregular rows of black hairs behind postocular setae. Antenna falling short of lower margin of face by about 1/2 length of first flagellomere, a seta on pedicel 2/3 in length to first flagellomere, the latter twice as long as pedicel or more. Arista plumose, total width including plumosity about twice as wide as first flagellomere, palpus developed, in length equal to or more than antenna, prementum about as long as wide, labella large.

Thorax closed above hind coxae by a sclerotized bridge; thorax black, covered with brownish gray pruinosity. Four black longitudinal vittae on scutum, inner vitta about 1/2-5/6 as wide as pruinose portion between inner and outer vittae on presutural area of scutum; scutellum black on basal half, with gray pruinosity on apical half. Anterior and posterior spiracles yellow, posterior spiracle small, subequal in length to apex of halter, with subcircular posterior lapette. Prosternum bare, about 1.0-1.5 times as long as wide; propisternum, katepimeron and suprasquamal ridge bare; 2 strong setae on postpronotal lobe, 1+ 1 *ac*, 2+ 3 *dc*, 0+ 1 *ia*, 2 *sa* setae, 1+ 1 katepisternal setae; scutellum with 2 pairs of strong marginal setae, subapical scutellar setae 2.5-3.0 times, crossed apical scutellar setae 1.5-2.0 times as long as scutellum, and with a pair of fine discal scutellar setae.

Wings hyaline, smoky brown, tegula dark brown, basicosta reddish brown to brown; costal spine short, about 1/2 as long as crossvein *r-m*, relative lengths of 2nd, 3rd and 4th costal section approximately 1.0:2.8:1.2; basal node of vein *R*₄₊₅ only with 1 setula dorsally and 2-3 fine hairs ventrally, sometimes with 1-2 additional fine hairs dorsally; vein *M*₁₊₂ blunt at bend, length of vein *M*₁₊₂ from discal crossvein to its bend subequal to that from bend to apex of *M*₁₊₂, about 2.2 times as long as distance between bend and wing margin; cell *r*₄₊₅ narrowly opened at apex. Halteres yellow. Lower calypter brownish, long fringe on outer margin.

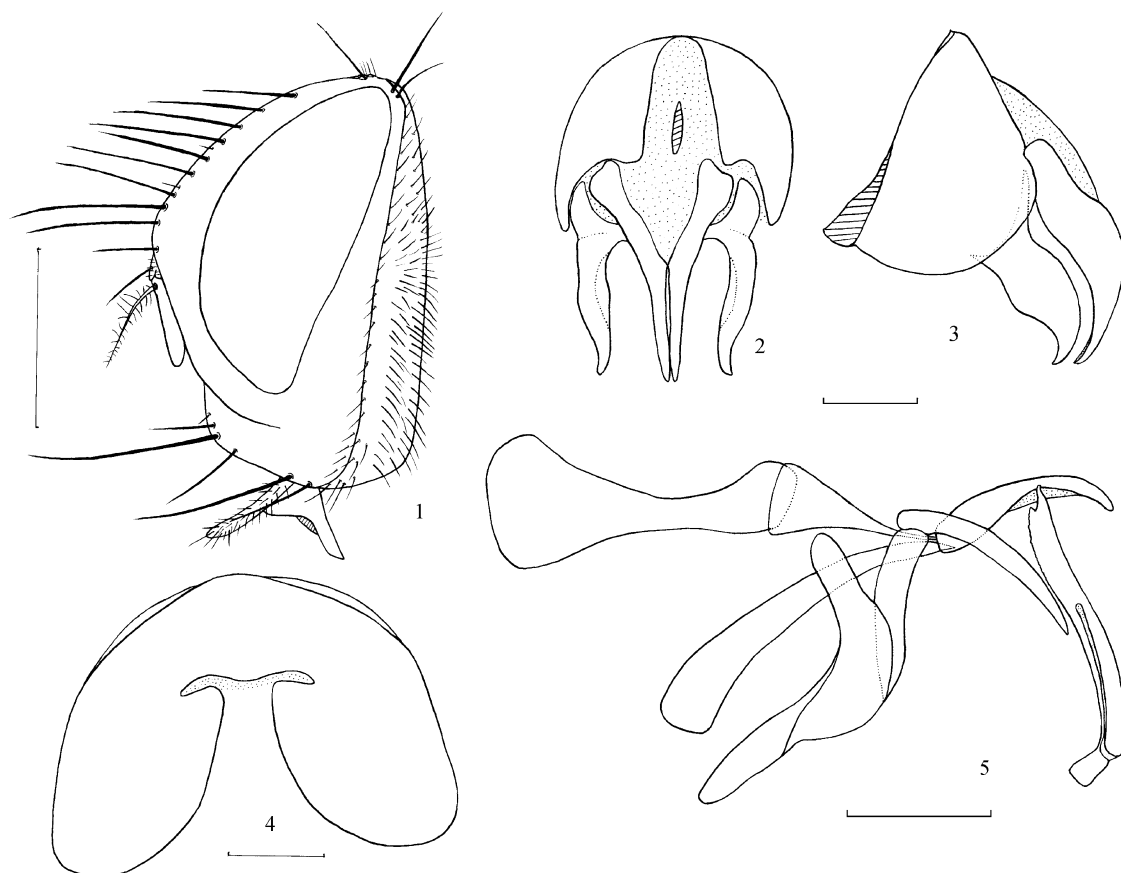
Leg elongate, reddish yellow except black tarsi, claw dark brown, pulvilli yellowish, claw slightly longer than, pulvillus equal to fifth tarsomere; fore coxa bare on inner anterior surface, hind tibia slightly sinuate inward at basal 1/3. Fore tibia with 1 *ad* and 1 *p* seta, at apex with 1 *ad* and 1 *pv* setae; mid tibia with 1 *ad*, 2 *pd* and 1 *v* setae; hind tibia with 1 *av*,

2-3 *ad* and 2 *pd*, at apex with 1 *av*, 1 *ad* and 1 *d* setae.

Abdomen elongate, nearly cylindrical, about 1.5 times as long as combined length of head and thorax; abdomen reddish yellow in ground color, subhyaline, narrow mid dorsal portion and ventral margin of syntergite 1+ 2 to tergite 4, posterior 1/5-1/4 of tergite 4 and entire tergite 5 dark brown, anterior 1/8-1/7 of tergites 3 and 4, and anterior 2/3 of tergite 5 covered with grayish white pruinosity. Abdominal syntergite 1+ 2 excavated at base, with 2 median marginal, 1 lateral marginal, and 3-4 lateral discal setae; tergites 3 and 4 each with a pair of medial discal and 1 lateral discal setae; tergite 3 with 2 median marginal and 1-2 lateral marginal setae, tergite 4 with a row of marginal setae, tergite 5 with a row of marginal and irregular discal setae. Sternites concealed, sternite 5 with round base and deep median cleft, latter about 2/3 length of the sternite, its posterior lobe wide and blunt.

Male terminalia. In dorsal view cerci evenly narrowed and pointed at apex, surstylus slender, apex evenly pointed and weakly curved outwards. In profile cerci evenly curved posteriorly, surstylus slightly widened at middle, apex curved ventrally and pointed; gonopod long, slightly bent posteriorly; paramere slender, about as long as basiphallus; distiphallus situated at apical 2/5 of basiphallus, mostly sclerotized, slender, distinctly longer than basiphallus, basal part membranous ventrally, with some microspinules, sclerotized basal part about 7 times as long as apical part, ejaculatory apodeme large, slightly shorter than aedeagal apodeme.

Female. Conspicuously differing from male as follows: vertex about 0.3 of head width; frontal vitta at middle slightly narrower than fronto-orbital plate; gena about 0.36 of eye height; ocellar seta fine small, shorter than hair-like outer vertical seta, the latter about 1/3 length of inner vertical seta, inner vertical seta about 0.43 of eye height, 1 prevertical seta directed outwards, 2 proclinate orbital setae, anterior seta stronger than posterior one, posterior orbital seta about as long as prevertical seta or inner vertical seta; 6-8 inclinate frontal setae; claw and pulvillus shorter than fifth tarsus; scutellum with an additional seta-like hair between apical and lateral scutellar setae; abdomen mostly dark brown to black, reddish yellow only on syntergite 1+ 2 and base of tergite 3 ventrally and partly mid dorsal surface of syntergite 1+ 2, grayish pruinosity on anterior 1/3-1/2 of tergite 3,



Figs 1-5. *Leptothelaira longipennis* sp. nov. ♂. 1. Male head in profile. 2-3. Epandrium cerci and surstyli in dorsal view and profile. 4. Hypandrium, apodeme, gonopod, paramere and phallus in profile. 5. Sternite 5. Scale bars: 1= 1.0 mm, 2-5= 0.2 mm.

1/2 of tergite 4 and 2/3 of tergite 5; tergites 3 and 4 without lateral discal seta, tergite 5 with a row of 4 discal setae.

Etymology. Specific epithet Latin adjective longus (= long) plus naun penis is taken from diagnostic characters of this species, large ejaculatory apodeme and long distiphallus.

Remarks. This species is very similar to *L. meridionalis* Mesnil et Shima, 1979, but it is distinguished from the latter with fine and distinct ocellar seta, which smaller than inner vertical seta, posterior 1/5-1/4 of tergite 4 dark brown, sternite 5 with round base and deep median cleft, surstylus distinctly pointed at apex, curved ventrally and outwards weakly, distiphallus distinctly longer than basiphallus.

Leptothelaira orientalis Mesnil et Shima, 1979

Leptothelaira orientalis Mesnil et Shima, 1979: 481. - Shima, 1988: 18 (key).

Diagnosis. Ocellar seta fine and shorter than outer vertical seta, dark inner vitta about 2/3 as wide as pruinose portion between inner and outer vittae on

presutural area of scutum, abdominal tergites 4 and 5 of male broadly reddish yellow anteriorly, darkened on posterior 1/5-1/3 of tergite 4 and posterior half of tergite 5.

Material examined. 1 ♂, Huaping, 700-1300 m, Longsheng, Guangxi, China, 3 Oct. 2004, ZHANG Chun Tian (SNUQ).

Distribution. China (new record from Guangxi); Vietnam (Type locality: Fyan).

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中国瘦寄蝇属一新种和一新纪录种 (双翅目, 寄蝇科)

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摘 要 瘦寄蝇属 *Leptothelaira* Mesnil et Shima 隶于长足寄蝇亚科 Dexinae 瘦寄蝇族 Leptothelairini; 其体细长, 后足基节上部具 1 宽而闭合的骨化桥, 翅 R₄₊₅脉基部背面具 1 根小鬃; 已知分布于俄罗斯远东南部、日本、越南、尼泊尔和我国台湾。本文记述了采自我国广西龙胜华坪的瘦寄蝇属 1 新纪录种: 东方瘦寄蝇 *L. orientalis* Mesnil et Shima, 1979 和

产自陕西太白山和山西沁源与方山的 1 新种: 长茎瘦寄蝇 *L. longipennis* sp. nov., 新种与分布东洋区的南方瘦寄蝇 *L. meridionalis* Mesnil et Shima 近似, 但单眼鬃弱于内顶鬃, 腹部第 4 背板后 1/4~ 1/5 和第 5 背板完全黑, 第 5 腹板基部圆, 中央裂深且基部宽, 侧尾叶端部较窄而尖等。新种模式标本保存在沈阳师范大学昆虫研究所。

关键词 双翅目, 寄蝇科, 瘦寄蝇属, 新种, 新纪录, 中国.

中图分类号 Q69. 453. 5